



Indiana State Department of Health

Epidemiology Resource Center

Quick Facts

About Plague

What is plague?

Plague is a bacterial infection caused by *Yersinia pestis*. Plague can be found on every continent except Australia and Antarctica. There are three kinds of plague infection; bubonic (lymph node), septicemic (blood), and pneumonic (lung).

How is plague spread?

Bubonic plague is spread through bites from plague-infected fleas or insects. Typically, human populations become infected after a large number of rats have died from plague, which forces the movement of the flea population from its natural rat reservoir to humans. Bubonic plague is NOT transmitted from person to person.

Septicemic plague is classified as primary or secondary. Primary septicemic plague is spread by direct contact with infected tissues or fluids from handling sick or dead animals. Secondary septicemic plague occurs when the bacteria from bubonic plague invade the bloodstream. Septicemic plague is NOT transmitted from person to person.

Pneumonic plague is also classified as primary or secondary. Pneumonic plague IS transmitted from person to person. Primary pneumonic plague is spread through close contact with a person or animal infected with pneumonic plague. Typically, it is spread from person to person or animal to person, primarily from the mouth and

throat droplets or aerosols from the infected person. Secondary pneumonic plague occurs when the bacteria spreads to the lungs through the blood in a person with bubonic and/or septicemic plague.

Who is at risk for plague?

Outbreaks in people are usually associated with infected rats and rat fleas that live in the home. This may occur in areas where housing and sanitation conditions are poor. Cases in the United States are most often in the Southwestern states and may occur in either rural communities or in cities.

How do I know if I have plague?

Patients develop symptoms of bubonic plague 1-8 days after being bitten by an infected flea. Symptoms include sudden onset of fever, chills, weakness, and a swollen or tender lymph node called a bubo, which usually develops within one day. Buboes typically are found in the groin, armpits, or neck regions and can be very painful. Occasionally some people infected with bubonic plague will develop blood or lung infections.

Patients typically develop symptoms of pneumonic plague 1-4 days after infection. Symptoms of pneumonic plague include severe pneumonia, chest pain, difficulty breathing, cough and coughing up blood.

How can plague be treated?

Bubonic and pneumonic plague can be treated with antibiotics. Pneumonic plague can be more serious and may require advanced supportive medical care and isolation as it IS spread from person to person.

How is plague prevented?

Currently there is no vaccine available in the United States.

You can minimize your risk for infection of bubonic plague through good rodent control efforts and limiting your exposure to rodents and wild animals.

While pneumonic plague is extremely rare, you can limit your risk of exposure by limiting your contact with infected persons and washing your hands frequently.

All information presented is intended for public use. For more information, please refer to:

<http://www.cdc.gov/ncidod/dvbid/plague/index.htm>

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